REMARKS

Claim 14 has been amended to include some of the recitations formerly found in claim 2.

Upon entry of the Amendment, claims 2-14 will be pending.

Applicants provide the following explanation with respect to the claimed invention.

According to the present invention, the formation of the belt layer on the rotating support is attained by one of the claimed methods (1)-(3).

In the method (1), the belt layer is formed by successively laminating coating rubber (thin sheet) → steel cords (naturally inclined at a given angle with respect to equatorial plane) → coating rubber (thin sheet) (on the carcass formed on the rotating support).

In the method (2), a small-width band-shaped body previously formed by covering a single steel cord or a plurality of steel cords with a coating rubber are affixed (on the carcass formed on the rotating support).

In the method (3), a small-width band-shaped body is formed by covering a single steel cord or a plurality of steel cords with a coating rubber during the tire shaping and affixed (on the carcass formed on the rotating support).

In any case, when the belt is comprised of two or more belt layers, each method described above is repeated several times. Moreover, the laminate or the band-shaped body assembly constitute the belt layer in the subsequent vulcanization step.

Moreover, the affixing of the band-shaped body means that the band-shaped body is wound on the rotating support so as to arrange these bodies side by side in the widthwise

direction of the support (at a given inclination angle with respect to equatorial plane) for attaining the required belt width.

As described on page 2, lines 12 to 27 of the specification of this application, the present invention is directed to solving the problem of the workability of the rubber composition in the formation of the belt layer, which is out of question in the conventional tire shaping method, in the core shaping of the tire. In this regard, the viscosity of the rubber composition as a coating rubber for the formation of the belt layer is significant in the present invention. The viscosity of uncured rubber in the present invention is measured before vulcanization because the measurement is impossible after the vulcanization.

In the core shaping, the tread and other rubber member (side rubber, bead filler and the like) are formed by spirally winding a band-shaped non-reinforced uncured rubber composition on the rotating support. On the other hand, the belt layer is formed by the methods (1)-(3) as mentioned above.

Claims 2-14 have been rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the written description requirement.

The Examiner asserts that in new claim 14, the reference to "a single steel cord" in the context of (1) is not disclosed in the original disclosure and thus is "new matter."

Additionally, the Examiner asserts that in claim 14, the reference to "spirally winding the belt layer on a rotating support" is not disclosed in the original disclosure and thus is "new matter."

Applicants have deleted the recitation "a single steel cord" from (1) in claim 14.

Applicants have also deleted the recitation "spirally winding the belt layer on a rotating support" from claim 14.

In view of the foregoing, Applicants submit that the recitations in claim 14 are fully described in the specification, as filed. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

Claims 2-14 have been rejected 35 U.S.C. §112, second paragraph, as allegedly being indefinite.

The Examiner asserts that claim 14 is still confusing because it is unclear what is being referenced in steps (1), (2) and (3) in claim 14.

For precision of language and to alleviate any confusion in the language of the claim, Applicants have made additional amendments to claim 14.

In view of the foregoing, Applicants submit that claim 14 is clear and definite and Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

Claims 1 and 6-8 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over GB 1,487,426 to Bekaert taken in view of Sandstrom et al., U.S. Patent No. 5,394,919 ("Sandstrom") or Ravagnani et al., U.S. Patent No. 4,239,663 ("Ravagnani").

Claim 14 has been amended to include the viscosity of the rubber composition which was formerly recited in claim 2. Claim 2 has not been rejected under 35 U.S.C. § 103 based on Bekaert in view of Sandstrom or Ravagnani. Applicants submit that none of Bekaert, Sandstrom or Ravagnani teach or suggest a rubber composition that has a viscosity of not more than 2 kPa·s as measured at a shearing rate of 750 s^{-1} and a temperature of 100°C according to ASTM

D5099-93. Therefore, claim 14 and claims 6-8, which depend therefrom, would not have been obvious based on Bekaert in view of Sandstrom or Ravagnani.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

Claims 1-13 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over GB 1,487,426 to Bekaert taken in view of EP 481080 to Nakagawa et al. ("Nakagawa") and optionally further in view of at least one of Sharma, U.S. Patent No. 4,615,369 and Vasseur, U.S. Patent No. 5,871,597.

The Examiner asserts that Sharma and Vasseur are directed to coating rubbers for steel belts and suggest suitable belt coating compositions that meet the claimed tensile stress and break elongation recited in Applicants' claim 2. Thus, the Examiner asserts that it would have been obvious to one of ordinary skill in the art to select the values as claimed. The Examiner acknowledges that none of the references disclose Applicants' claimed viscosity, but the Examiner asserts that the claimed viscosity would seem to be a parameter within the routine and obvious selection by the artisan.

A particular parameter must first be recognized as a result-effective variable before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618 (C.C.P.A. 1977). Since none of the cited references disclose that the rubber composition for the coating rubber has the claimed viscosity and since none of the references disclose the importance of having a low viscosity, it would not have been obvious to one of ordinary skill in the art to optimize the viscosity and arrive at

Applicants' claimed viscosity based on the teachings of Bekaert, Nakagawa and Sharma or Vasseur.

In view of the foregoing, Applicants submit that claims 2-13 (and claim 14) would not have been obvious based on Bekaert, Nakagawa and Sharma or Vasseur. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

Claims 1 and 3-8 have been rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over GB 1,487,426 to Bekaert taken in view of Grimberg et al., U.S. Publication No. 2002/0221760 ("Grimberg") or Uchino et al., U.S. Publication No. 2002/0088522 ("Uchino").

Claim 14 has been amended to include the viscosity of the rubber composition which was formerly recited in claim 2. Claim 2 has not been rejected under 35 U.S.C. § 103 based on Bekaert in view of Grimberg or Uchino. Applicants submit that none of Bekaert, Grimberg or Uchino teach or suggest a rubber composition that has a viscosity of not more than 2 kPa·s as measured at a shearing rate of 750 s^{-1} and a temperature of 100°C according to ASTM D5099-93. Therefore, claim 14 and claims 3-8, which depend therefrom, would not have been obvious based on Bekaert in view of Grimberg or Uchino.

In view of the foregoing, Applicants respectfully request that the Examiner reconsider and withdraw the rejection.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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